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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/856,916	05/30/2001	August Geiger	051176-5036	6036

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EXAMINER

HAMILTON, KIMBERLY Y

ART UNIT	PAPER NUMBER
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2635

DATE MAILED: 12/04/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,916

Applicant(s)

GEIGER ET AL.

Examiner

Kimberly Hamilton

Art Unit

2635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 2 and 6-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 May 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5. 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings within fig. 1 are objected to under 37 CFR 1.83(a) because the applicant fails to label the boxes as described in the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
2. The drawings of figs. 2 and 4-7 are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: **28**. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 2 and 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Regarding claim 8, the phrase "**for example**" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.
2. Regarding claims 2 and 6-8, the terminology "**preferably**" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-5 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanuki et al (US 6389856).

Regarding claims 1, 2 and 4, Watanuki teaches an electronic locking apparatus for vehicles (fig. 1, LA) that is made for an associated electronic key (fig. 1, 20). The electronic key (20) emits a signal via its embedded chip circuit (fig.1, 23) to the electronic lock (LA), which receives the transmitted signal. The control unit (fig. 8, 60) performs an identification verification analysis to determine if the signals between the electronic key (20) and the electronic lock (LA) coincide with one another (col. 2, lines

14-25). In addition, Watanuki teaches that blocking element (read as first slider, fig.1, 12) is actuated by the insertion portion (fig. 1, 21) of the electronic key (20) (col. 2, lines 41-44). Also, other blocking elements, such as the plurality of tumblers (fig.1, 6) and the stopper (fig. 1, 9), are in the electronic lock (LA) (col. 5, lines 12-22). Moreover, Watanuki teaches that the electronic lock apparatus (LA) has a first check lever (fig. 1, 14) that communicates with the first slider (12) and the switching element (read as key presence/absence detecting switch fig1. 11) (col. 5, lines 55-58).

Regarding claim 3, Watanuki teaches that the tumbler (6) engages the tumbler groove (fig. 6, 7) by a spring force (fig. 6, 6a) when the electronic key (20) is inserted into the electronic lock (LA) (col. 8, lines 63-67).

Regarding claim 5, Watanuki discloses that the lever (14) within the electronic lock (LA) transmits a sliding-like motion of the first slider (12) in order for the key-detecting switch (11) is turned on (col. 6, lines 1-7).

Regarding claim 9, Watanuki teaches that the first slider (12) engages the concave portion (fig.1, 22) of the electronic key (20) to prevent the key (20) from sliding out of the electronic lock cylinder (fig.1, 1A).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanuki in view of Mullin et al (GB 2169651A). Watanuki does teach that the blocking element is spring-loaded, which acts on the lever (14) inside a groove (7) that is inside of the electronic lock (LA). However, Watanuki fails to teach the slider (12) has a cam on top of the first slide (12).

On the other hand, Mullin, who teaches a locking device with an encoded key, discloses that the cam member (fig. 1, 6) slides within a groove. The cam member (6) is to operate the ignition switch of a vehicle (col. 1, lines 63-65). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention was made to supply the locking apparatus (LA) that Watanuki teaches with a cam member (6) that Mullin suggests for the locking device within a vehicle.

2. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanuki in view Mullin in further view of Neuhalfen (US 5974661). Watanuki teaches that the switch element (11) is of the push-button type, for the lever (14) actuates the switch (11) to be ON (col. 6, lines 1-7). However, Watanuki fails to teach that the switch (11) is of surface mounted device (SMD) technology on a printed-circuit board (PC boards).

Neuhalfen, who teaches electronic components within a surface mounted device, discloses that SMD is designed to protect electronic components from electrostatic discharge (ESD) (Abstract, lines 4-6). In addition, Neuhalfen also teaches that PC boards are found in electronic devices of all kinds (col. 1, 25-29). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention was made to include SMD technology in the ignition lock of Watanuki as evident by

Neuhalfen, because Watanuki suggests that the electronic locking device is mounted within a vehicle (col. 2, lines 7-13). Henceforth, in order to prevent any damage to the electronic device, such as an electronic lock, SMD is needed as Neuhalfen suggests (col. 1, lines 25-29).

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Watanuki in view of Nagae et al (US 6003349). Watanuki teaches that the electronic lock (LA) has a rotating member, which is actuated by the insertion portion (22) of the electronic key (20) (col. 2, lines 29-33). However, Watanuki fails to teach that the blocking elements are mounted on or in the rotor.

Nagae, who teaches a vehicle lock device, discloses that the slide members are moved in a direction by means of the cam member, which in turn, affects the rotation member (col. 2, lines 38-44). Additionally, Nagae teaches that there are tumblers (blocking elements) within the rotor. The tumblers are only moved when the correct key is inserted into the key rotor (col. 1, line 60 – col. 2, line 4). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention was made to have the rotor interacts with the cam member and the blocking elements within the ignition lock of Watanuki as evident by Nagae, for Watanuki teaches that electronic locking apparatus (LA) has a rotating member (col. 2, lines 29-33). In order to prevent the wrong key from being entered into the key rotor, tumblers are located within the key rotor to block the key as Nagae teaches (col. 2, lines, 1-4).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Hamilton whose telephone number is 703.305.8975. The examiner can normally be reached on 7am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703.305.4704. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

KYH

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